

**DRAFT Small Business Economic Impact Statement
For
Proposed Shoreline Management Act Guidelines**
(Chapter 173-26 WAC)

Prepared by:

Washington State Department of Ecology
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EXECUTIVE SUMMARY

The Department of Ecology is proposing adoption of new Shoreline Management Act (SMA) Guidelines. These guidelines provide procedural and substantive directions for local governments that are subject to the Shoreline Management Act as they review and update Shoreline Master Programs. As a result of an agreement with various stakeholders, Ecology is developing and issuing this Draft Small Business Economic Impact Statement (SBEIS) under RCW 19.85.030 to accompany this rule adoption. After review and comment by interested persons, Ecology will issue a Final SBEIS and use the information developed by the SBEIS as required by law to ensure that the proposed rules are consistent with legislative policy.

The objective of this SBEIS is to identify and evaluate the various requirements and costs that the proposed rule might impose on business. In particular, the SBEIS studies whether the costs on business that might be imposed by the proposed rule impose a disproportionate impact on the State's small businesses.

The Shoreline Management Act guidelines being considered for adoption are, most directly, rules for local government to follow when developing a local shoreline master program. As the term is defined by RCW 19.85.020, no "business" is required to comply with any direct requirement of these guidelines. The guidelines are directed at local governments who are reviewing the condition of their shorelines and who will be adopting updated SMPs to be consistent with the guidelines. Accordingly, the guidelines do not directly regulate development and use of the shorelines; the regulations of the local government in the SMP regulate development and use of the shorelines. The guidelines of course provide minimum standards for the local shoreline master programs and therefore have an indirect regulatory effect, which this SBEIS will evaluate.

This SBEIS first analyzes particular industries to evaluate the costs imposed by the proposed rule. The SMA Guidelines could indirectly affect many industries, but several are more likely to be affected than others. This SBEIS addresses the following general business areas as a basis for characterizing costs imposed on business and whether there is a disproportionate cost placed on small businesses:

- development and construction businesses,
- shoreline stabilization contractors,
- agriculture,
- mining,
- marine transportation (e.g. marinas, ferries, etc.).

All industry categories listed above could be affected by the proposed rule through increased compliance costs associated with increased shoreline investigation, monitoring and mitigation. This would include the costs associated with engineers, biologists, and other professional services that are required to be retained as part of an increased emphasis on shoreline assessment and no net loss of ecological function.

These increased costs will be borne by both small and large firms to the extent that both these types of firms work in shoreline areas. Some of these additional costs will likely be passed along to the purchasers of developed land or the owners of projects on which contractors are working which will reduce the direct impact on these industries.

Assessing disproportionate impacts is made difficult due to lack of available data, which in part reflects the indirect nature of how the Guidelines affect local government regulation which in turn may affect businesses. In general, it is reasonable to assume that assessment/mitigation costs are going to be related to the size of a project undertaken. In the case of developers, the mining industry and marine transportation, these costs should vary with the size of the parcels developed. If larger firms tend to utilize larger parcels, then the assessment costs will tend to be more proportional than if all firms utilize the same size parcels. Existing data of a wide variety of industrial classifications in two counties indicate that larger firms do tend to utilize larger parcels, but on a “per employee” basis, the reverse is true; smaller firms utilize more land/employee. For purposes of analysis, this SBEIS conservatively evaluates this data to suggest that compliance costs may be disproportionate.

A second potential impact that may be imposed on businesses in the shoreline is reductions in land value that is possible from increased shoreline land use restrictions. To analyze whether a typical regulation would have an effect on businesses, a hypothetical scenario was constructed involving the imposition of a vegetative buffer which would reduce the amount of useable land for any shoreline owner by 10%. To analyze the impact of this hypothetical type of land use restriction, shoreline ownership data was obtained for two counties to evaluate land ownership in detail. Data for King and Yakima counties were considered, and it was found that, smaller firms utilize larger parcels on a per employee basis. The results of this analysis indicate that the disproportionate cost impact of a hypothetical land use restriction between small and large firms will be between 8 and 11 times in King County and 2 and 4 times in Yakima County (It should be emphasized that this analysis is offered in order to detect the potential for disproportionate impact. This analysis, however, is not intended to demonstrate that the SMA Guidelines in fact reduce any land values.)

The draft regulations include several provisions that may mitigate any disproportionate effects of these regulations. These include

- A requirement that the guidelines assure compliance with all constitutional and statutory limitations on the regulation of private property.
- Guideline design that allows for flexibility in SMP development and mitigation requirements that allow for a wide variety of alternatives.

- An implementation schedule for these guidelines allowing local government up to 11 years to develop and adopt master programs providing a substantial amount of time for complying businesses to adapt.
- Provisions for conditional uses and variances providing regulatory flexibility to adjust requirements.
- Promotion of alternative approaches to shoreline development that will mitigate the impacts of guideline requirements on some firms.

SMALL BUSINESS ECONOMIC IMPACT STATEMENT
FOR
PROPOSED SHORELINE MANAGEMENT ACT GUIDELINES
CHAPTER 173-26 WAC
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Introduction

The Department of Ecology is proposing adoption of new Shoreline Management Act (SMA) Guidelines. These guidelines provide procedural and substantive directions for the local governments that are subject to the Shoreline Management Act (“the Act” or “the SMA”) as they review and update Shoreline Master Programs (“SMPs”). The Act requires Ecology to periodically review and amend the existing guidelines for SMPs that implement the Act. In particular, updating the guidelines and shoreline master programs was directed by the legislature in 1995 amendments of RCW 90.58.060.

Broadly stated, the goals of adopting the proposed guidelines include:

- Complying with the legislative mandate in RCW 90.58.060
- Updating the former guidelines to bring them into conformance with the intent and language of the Act and with current practices and information relevant to shoreline management.

As a result of an agreement with various stakeholders, Ecology is developing and issuing this Draft Small Business Economic Impact Statement (SBEIS) under RCW 19.85.030 to accompany this rule adoption. After review and comment by interested persons, Ecology will issue a Final SBEIS and use the information developed by the SBEIS as required by law to ensure that the proposed rules are consistent with legislative policy.

Objective of the SBEIS

The objective of this SBEIS is to identify and evaluate the various requirements and costs that the proposed rule might impose on business. In particular, the SBEIS examines whether the costs on business that might be imposed by the proposed rule impose a disproportionate impact on the State’s small businesses. This is consistent with the legislative purpose of the Regulatory Fairness Act (RCW 19.85) and is set out in RCW 19.85.011:

“The legislature finds that administrative rules adopted by state agencies can have a disproportionate impact on the state’s small businesses because of the size of those businesses. This disproportionate impact reduces competition, innovation, employment, and new employment opportunities, and threatens the very existence of some small businesses. The legislature therefore enacts the Regulatory Fairness Act with the intent of reducing the disproportionate impact of state administrative rules on small business”.

The specific purpose and required contents of the SBEIS is contained in RCW 19.85.040. (The bracketed numbers and emphasized words are for the reader’s convenience, and reflect some of the organization of this draft SBEIS.)

*“(1) A small business economic impact statement must include [1] a brief description of the reporting, record keeping, and other compliance requirements of the proposed rule, and [2] the kinds of professional services that **a small business** is likely to need in order to comply with such requirements. [3] It shall analyze the costs of compliance **for businesses required to comply with the proposed rule** adopted pursuant to RCW 34.05.320, including costs of equipment, supplies, labor and increased administrative costs. [4] It shall consider, based on input received, whether compliance with the rule will cause businesses to lose sales or revenue. [5] To determine whether the proposed rule will have a disproportionate impact on small businesses, the impact statement must compare the costs of compliance for small businesses with the cost of compliance for the ten percent of businesses that are the largest businesses required to comply with the proposed rules using one or more of the following as a basis for comparing costs:*

- a. Cost per employee*
- b. Cost per hour of labor*
- c. Cost per hundred dollars of sales*

(2) A small business economic impact statement must also include:

a. [6] A statement taken by the agency to reduce the costs of the rule on small businesses as required by RCW 19.85.030(3), or reasonable justification for not doing so, addressing the options listed in RCW 19.85.030(3).

b. [7] A description of how the agency will involve small business in the development of the rule; and

c. [8] A list of industries that will be required to comply with the rule. However, this subsection (2) (c) shall not be construed to preclude application of the rule to any business or industry to which it would otherwise apply”.

For purposes of an SBEIS, the terms “business,” “small business,” and “Industry” are defined by RCW 19.85.020. “Small business” means any business

entity, including a sole proprietorship, corporation, partnership, or other legal entity, that is owned and operated independently from all other businesses, that has the purpose of making a profit, and that has fifty or fewer employees. “Industry” means all of the businesses in this state in any one four-digit standard industrial classification as published by the United States Department of Commerce.

After summarizing the requirements and content of the proposed rule, this SBEIS will address the required elements of an SBEIS in the following order:

Part 1- This section provides [1] a brief description of the reporting, record keeping, and other compliance requirements of the proposed rule, [2] the kinds of professional services that a small business is likely to need in order to comply with such requirements, [3] the costs of compliance for businesses required to comply with the proposed rule including costs of equipment, supplies, labor and increased administrative costs, and [4] whether compliance with the rule will cause businesses to lose sales or revenue.

Part 2 – This section evaluates [5] whether the proposed rule will have a disproportionate impact on small businesses.

Part 3 – This section includes [5] an analysis of a hypothetical scenario to determine if the guidelines might disproportionately impact small businesses located in shoreline areas by comparing the costs of compliance for small businesses with the cost of compliance for businesses that are the largest businesses.

Part 4 – This section considers [6] actions taken to reduce the impact of the rule on small business.

Part 5 - This section describes [7] how small business was involved in the development of the rule.

Part 6 – This section provides [8] a list of industries required to comply with the rule.

Overview of the Shoreline Management Act and the Proposed Guidelines for Shoreline Master Programs

The Shoreline Management Act requires and authorizes a cooperative program between state and local government to plan for and regulate the uses of the shorelines of the state. The term shoreline is fully defined by RCW 90.58.030 and generally includes all lands covered by marine waters, rivers and streams greater than 20 cubic feet per second and ponds greater than 20 acres, and lands within 200 feet of the ordinary high water mark of those water bodies, and associated wetlands and flood plains.

Under the Act, local government has the primary responsibility for conducting the required planning and for administration of the local plan and development regulations. This is known as the local “shoreline master program” or SMP, once the SMP is adopted by local government and approved by Ecology. State Government, acting through the Department of Ecology, provides technical assistance and oversight to assure that the policies of the act are carried out. A primary responsibility of Ecology is the adoption of rules to guide the development or updating of local shoreline master programs, and to provide the standards by which Ecology will subsequently approve those programs.

In 1972 the department of Ecology adopted chapter 173-16 of the Washington Administrative Code (WAC 173-16), which set the initial guidelines for development of local shoreline master programs. Under the SMA, each City or County with “shorelines” as defined by the Act must adopt a shoreline master program (SMP) that is consistent with the Act and with Ecology guidelines. Each City and County, within these sideboards, is then authorized to tailor their SMP to their specific needs.

As a land use plan, SMP’s contain both a planning element and specific development regulations. The planning element identifies how the local government plans for the future development and uses of particular shorelines – such as defining whether an area is planned for commercial, residential, or urban uses. The regulatory elements provide implementing regulations that limit development and uses consistent with the plan for an area.

As noted above, the SMA itself defines the scope of the Act in terms of all marine waters, streams with flows of greater than 20 CFS, lakes larger than 20 acres and upland areas 200 feet landward (shorelands), associated wetlands and some or all of 100 year floodplains. The proposed guidelines do not alter these statutorily established limits and requirements regarding where the SMA must be applied.

One of the key implementing provisions of the SMA is the permit system it establishes for construction and development activities, which fall within the definition of “substantial development,” and the requirements the SMA provides for notice and public comment opportunities on such substantial development. The Act also requires that local government establish a system for review of variances that function like a permit process. Variances allow for consideration of reasonable exceptions from the applicability of the provisions of an SMP where its application is disproportionately burdensome based on specific circumstances.

Finally, the SMA allows local governments to create Conditional Uses within its master program which require a Conditional Use permit to be approved. This allows consideration of uses that (in the absence of appropriate conditions) may or may not be consistent with the master program depending on the specific elements of the project and site. All conditional use permits and all variances issued and approved by the local government must also be approved by Ecology to be valid. The provisions of the permit system are set in statute and are not altered by the proposed guidelines.

The local master program is a comprehensive land use regulation for the shoreline and applies to all uses and developments whether or not a statutorily established permit is required.

In 1995 the Legislature amended the SMA to direct Ecology to review and adopt new guidelines for local master programs. The Department initiated a process (itemized in Appendix A) that resulted in the guidelines currently being considered for adoption. The purpose of this SBEIS is to focus on the potential incremental impacts to small business associated with adoption of updated guidelines, and to ensure that feasible and legal steps have been taken to reduce disproportionate costs that the rules would impose on small businesses.

Part 1 – Analyzing the Costs Imposed on Businesses.

The Shoreline Management Act guidelines being considered for adoption are, most directly, rules for local government to follow when developing a local shoreline master program. As the term is defined by RCW 19.85.020, no “business” is required to comply with any direct requirement of these guidelines. The guidelines are directed at local governments who are reviewing the condition of their shorelines and who will be adopting updated SMPs to be consistent with the guidelines. Accordingly, the guidelines do not directly regulate development and use of the shorelines; the regulations of the local government in the SMP regulate development and use of the shorelines. The guidelines of course provide minimum standards for the local shoreline master programs and therefore have an indirect regulatory effect, which this SBEIS will evaluate.¹

As land use rules, the primary effect of the master programs that result from the proposed guidelines will be on the development of new uses or facilities or expansion of existing uses or facilities. While local master programs may vary, with few exceptions existing uses are not required to change unless they propose to expand or otherwise redevelop their property. Thereby one primary group of businesses that could be affected by the guidelines and SMPs that comply with the guidelines is the development and construction industry in general, and particularly those segments of the industry that specialize in shoreline related development.

Other businesses likely to be affected by SMPs adopted in accordance with these guidelines are businesses that mine, dredge or otherwise move earth in the shorelines as a part of their operation. This is because the SMA definition of

¹ Under RCW 19.85.030(1), an agency is not required to do an SBEIS if its rule does not impose more than minor costs on businesses in an industry. Originally, before all local governments had shoreline master program regulations, the guidelines in WAC 173-16 affected permit decisions and thus may have imposed costs on an industry. Today, local governments have SMPs and the guidelines do not impose costs on business. Notwithstanding this potential reason for not doing an SBEIS, Ecology is developing and issuing this SBEIS to ensure that its guidelines have considered this information, and to fulfill its agreement with interested business and environmental groups to conduct an SBEIS process.

“development” includes these activities and therefore the ongoing operations require ongoing authorization.

Therefore, this SBEIS first analyzes particular business areas to evaluate the costs imposed on them by the proposed rules. It addresses the following areas as a basis for characterizing costs imposed on business and whether there is a disproportionate cost placed on small business in an industry:

- development and construction businesses,
- shoreline stabilization contractors,
- agriculture,
- mining,
- marine transportation

In addition to evaluating the costs on businesses that might be indirectly affected by the requirements of the guidelines, this SBEIS also evaluates how a wide variety of businesses located in the shoreline might be affected if a particular land use regulation is imposed. It tries to evaluate whether these guidelines impose disproportionate costs on smaller businesses when considering the variety of businesses that might locate on shoreline property. This analysis is contained in *Part 3 – An Analysis of Scenarios Evaluating Whether the Guidelines Could Disproportionately Affect the Variety of Businesses Located within Shorelines by Affecting Land Values*.

A Brief Description Of The Reporting, Record Keeping, And Other Compliance Requirements, and the Kinds Of Professional Services That A Small Business Is Likely To Need In Order To Comply, The Costs Of Equipment, Supplies, Labor And Increased Administrative Costs, Whether Such Compliance will Cause Businesses to Lose Sales or Revenue

The specific compliance costs borne by small and large firms are difficult to determine. The SMA Guidelines are intended to aid local jurisdictions in developing their own SMP's. Local governments then develop the specific management tools and regulations that will be imposed on the businesses within their jurisdiction. Ecology will approve the SMP; however, they will only be ensuring that the minimum standards outlined in the SMA and in the Guidelines are adhered to. As such, the effect of the guidelines is likely to vary significantly depending on the type of business, the location, and on the plans of the local government. However, given the goal of no net loss of shoreline ecological functions articulated in the draft guidelines, it can be reasonably stated that shoreline development costs will rise as a result of the guidelines (although other federal and state laws arguably impose similar requirements for environmental protection). The components of these costs may include all or one of the following; increased cost of preparatory studies, site design and mitigation, reduction in usable space, and/or increased land acquisition cost due to limitations on the availability of developable

land. Studies, site design and mitigation costs will be extremely variable. Increased land acquisition costs are very difficult to separate from other market factors that affect such costs.

As discussed above, the proposed rules do not require any “business” to conduct ongoing reporting or record keeping. Nothing in the proposed rules are likely to result in increased administrative costs, or add general requirements for equipment, supplies or labor for businesses in general. The main additional costs will result from increased environmental assessment costs, reduction in revenue and/or limitations on land uses and values.

Development Businesses

It is likely that some types of development activities will require additional investigation of potential impacts to shoreline resources as a prerequisite to approval of the project, and mitigation of those impacts which may include ongoing monitoring of the mitigation for a specific period of time to assure that it accomplishes the intended purpose. Professional services will be required for most substantial developments to conduct this investigation and prepare mitigation proposals. These would typically be scientific and technical design services. This is, however, not significantly different than the existing requirements of most current SMPs. It is similar to requirements of other laws applicable to development in shoreline areas.

For the construction and development industry, small, common projects such as a single family residence will typically require little special investigation, if any. In this way, the Act itself and the guidelines reduce impact on the smaller businesses associated with single family residence construction. Compliance with the specific requirements of the shoreline master program will be all that is required.

Conversely, development of a large parcel of previously undeveloped land for almost any use will require a thorough investigation of the impacts to shoreline resources and development of mitigation options to address the identified impacts.

It is unlikely that any compliance cost will result in an existing business losing revenue or sales, because the predominant effect of the guidelines is prospective planning and regulation of land use. The guidelines should affect the size or location of new or additional development and subdivisions, which could conceivably affect the extent of future potential increased revenue or sales. The guidelines have attempted to mitigate that effect by emphasizing constitutional protections for local governments to consider in updating their SMPs. However, given the overall purposes of the SMA described in RCW 90.58.020, appropriate limitations on subdivision and development are required by statute, and local SMPs have very limited potential to distinguish between small and large subdivision businesses in setting land use plans and development regulations.

Shoreline Stabilization Contractors

Because of the nature of the jobs they do, which directly alter shoreline areas, shoreline stabilization contractors will more likely be required to secure additional

professional services under the proposed guidelines. The guidelines require local master programs to include provisions that assure that where shoreline stabilization is allowed, that the specific nature of the problem (the “need”) is identified and that the solution is designed to minimize interference with the ecological functions in the area being affected. Mitigation of any adverse environmental impacts will also be required. These requirements will require evaluation of the hydrology and biology of the project vicinity and engineering design that takes this evaluation into account. This will likely result in increased assessment and mitigation costs.

Shoreline stabilization contractors may also experience a loss in sales or revenue as the new guidelines may lessen the need for shoreline stabilization and shoreline armoring at various locations.

Agricultural Businesses

Agricultural businesses are unlikely to have any additional professional service requirements for a number of reasons. Cultivation and other customary operations of a farm that currently exists are broadly “grandfathered in” under provisions of the SMA to the extent they occur on agricultural land. The guidelines and Act will not significantly affect these businesses.

Future conversion of non-agricultural land to agriculture will require compliance with the requirements of the SMP. However, as a general matter, the guidelines do not require new or special services to assure compliance with these requirements for SMPs.

New agricultural activities could experience a limitation on sales or revenue if useable land area is restricted adjacent to shorelines.

Mining Businesses

Mining operations within the shoreline may require additional professional services periodically to gain authorization of a new site or for expanding the use of an existing site beyond previously authorized areas or to provide monitoring of mitigation features once authorization is granted. Depending on the setting this will most likely involve hydrological and biological analysis and engineering services to address site characteristics and project design.

Sales or revenue should not be significantly affected by these requirements. However, any new land use restrictions developed as part of an SMP could affect future revenue.

Water Transportation Businesses

Traditional (floating) marina businesses are unlikely to require additional services either for development of new facilities or ongoing operation. Because they are located in the water, the issues that must be addressed as a result of a new local master program are likely to parallel the requirements of existing federal and state requirements currently applicable. Professional services necessary for land side development for marinas and other water oriented transportation businesses whether associated with a floating facility

or as part of a significant shoreline development would be similar to that for any development as described in the paragraph for “Development Businesses”.

Part 2 – Whether the Proposed Rule Will Have a Disproportionate Impact on Small Businesses

This analysis is provided to meet the guidelines of the Regulatory Fairness Act (RCW 19.85). To comply with the RFA, the SBEIS must identify potentially affected industries, define small and large businesses, and determine the compliance costs for these businesses. It then must compare the cost of compliance for small businesses with the cost of compliance for large businesses. If there turns out to be a disproportionate impact on small businesses in comparison with large businesses, the RFA requires that the costs imposed by the rule on small businesses be reduced where legal and feasible in meeting the objective of the statutes upon which the rule is based. If steps are not taken to reduce costs on small business, the agency must provide reasonable justification for not doing so.

As noted previously, the evaluation of potentially affected industries can hypothetically extend to indirect effects on most industries in the State. To limit the speculation about indirect effects, this SBEIS reviews five types of industries as noted above, because these could be more directly affected by local regulations adopted as a result of the revised SMA Guidelines. In general, the specific compliance costs are difficult to determine because the guidelines will not directly impose any specific requirements on businesses. The specific requirements will be developed by local governments and are unknown at this time. Moreover, the data necessary for determining disproportionate effects is not generally available in most cases. As such, a discussion of effects on small and large firms is provided below. Aggregate data on employment and income is provided, and a list of four-digit SIC codes is provided in Appendix A that parallels the five broad business classifications identified above.

Development Business

As noted previously, firms that are currently involved in subdividing and other land development activities may be required to perform increased environmental assessment, monitoring and mitigation activities as a result of the revised guidelines. The additional compliance costs associated with these increased requirements will be for direct professional services for such occupations as engineers, surveyors, geologists, and biologists. The specific increase will be based on the magnitude of the work to be performed (i.e. larger projects will likely require more assessment/mitigation and therefore are likely to cost more).

Industry data indicates that there are 369 firms in SIC 6552 “Subdividers and Developers” in Washington State with total employment of 2,083.² These are firms engaged in subdividing real property and developing it for resale on their own account.

² All summary employment data for Part 2 is from the Washington State Employment Security Department, September, 2002.

Of these firms, five (5) would be considered “large” firms (i.e. have at least 50 employees). The industry as a whole had gross income of approximately \$393 million in 2001.³

The ability of developers to pass these increased costs along to the purchasers of developed properties will depend on purchaser preferences for shoreline parcels and the prices of other properties available. To the extent that all identical shoreline properties will likely require additional assessment, and in cases with shoreline dependent industries, it is likely that much of the compliance costs could be passed along in the form of increased land prices. In cases where other non-shoreline properties are viable alternatives for prospective purchasers, only a portion of the increased compliance cost will likely be passed along. These additional costs may be borne as reduced profits either from direct costs or reduced land value. Since this will apply to most similar shoreline lots, we would not expect a change in the competitive nature of the shoreline development business.

Assessing the disproportionality of costs on any firm in this industry is made difficult due to the lack of available data and due to the indirect nature of the potential costs. Whether such costs are disproportionate would depend on size of the development projects undertaken by small and large firms and the degree of assessment/monitoring required. If we assume that assessment and mitigation costs are correlated with parcel size, then knowing the underlying shoreline property ownership and parcel size of these firms may allow us to consider compliance costs. In the data set collected and described in Appendix C, four land development firms were listed as owners of shoreline parcels in King County and identified as development firms (SIC 6552). They are all small firms the largest of which has 13 employees. As such, if new assessment requirements were placed on developers currently owning shoreline properties in King County, the additional costs would only affect small businesses in this industry. However, large firms are likely involved in shoreline development activities elsewhere and increased assessment costs may impact them.

Shoreline Stabilization Contractors

Shoreline stabilization contractors will be required to obtain additional professional assistance in assessing the hydrology and biology of the vicinity in which they will work and additional engineering design services as required.

Statewide there are 389 firms in SIC 1629 “Heavy Construction” with total employment of 4,095. This industry includes firms involved in all types of heavy construction other than building construction. Marine construction work listed in this category includes irrigation projects, flood control, channel construction, harbor and jetty construction, and pile driving and pier construction. Of these firms, 16 are considered

³ Gross income data is from Department of Revenue, 2001. Agricultural value of production data is from Washington Agricultural Statistics, 2002. These industry statistics for firm number, employment and income include all firms in the industry not just those that own or develop properties in the shoreline areas.

large firms. The total gross income for all firms in this industry was approximately \$1,311 million in 2001.

The additional professional costs described above would increase the cost of doing shoreline construction work. To the extent that all shoreline contractors will be required to perform increased assessment for any given location, the cost will likely be passed along to the project owner in terms of increased project costs. In that case, much of the additional costs may not be borne by shoreline contractors. However, if owners respond by reducing the amount of shoreline construction, contractors may experience reduced revenues. Moreover, revised SMP's may require facility siting in such a way as to minimize or eliminate the need for shoreline stabilization as a result of the guidelines. This could also reduce revenues for these firms.

The extent of the disproportionality will be determined by the size of the projects that small and large firms typically engage in and the magnitude of the increased assessment/mitigation costs. If larger firms tend to do larger projects, and larger projects require more extensive assessment, then this would tend to reduce the disproportionality among firms.

Agricultural Businesses

As noted previously, no particular increase in assessment/monitoring for agricultural land is likely to be required. However, cost impacts could be associated with any increase in land use restrictions on new agricultural endeavors (e.g. vegetative buffers, clearing restrictions, etc.)

Statewide there are 6,056 firms in the applicable SIC Major Groups 01 and 02 (see Appendix B) with total employment of 30,831. Of these firms, 66 would be considered large firms. Agriculture is an important part of the State's economy, with a total value of production of \$5.6 billion in 2001.

The extent of land use restrictions in agricultural shoreline areas is an area of considerable concern. The SMA guidelines impose no additional restrictions on existing agricultural use. However, conversions to and from agriculture could be subject to increased vegetative buffers, clearing and grubbing standards, etc. The extent of the impact will be driven by the area of land located within the jurisdiction of the SMA owned by small and large firms that is to be converted, and the specific standard applied. The impact of land use restrictions is considered in a hypothetical scenario in Part 3.

Mining Businesses

Mining businesses may experience an increase in assessment/monitoring costs associated with the new guidelines. This will include additional engineering and environmental assessment costs. The exact costs will depend on the scope of services required which will tend to depend on the size of the area to be considered and the frequency which evaluation is required.

Statewide there are 82 firms in SIC 1442 “Construction Sand and Gravel” with total employment of 1,037. Of these firms, five (5) would be considered large firms. The gross business income of these firms was \$155 million in 2001.

The ability of existing mining businesses to pass along additional compliance costs to consumers will depend on the spatial distribution of existing mining firms. If a majority of sand and gravel mines are located in the shoreline or are located far apart from one another, then it may be possible for these firms to raise their prices some to account for the increased costs. If only a small number of sand and gravel mines are located in the shoreline or they face substantial competition from non-shoreline mines, then they will have greater difficulty passing along increased costs in the form of increased prices. In this case, these firms will experience some reduction in profits. In general, for a given level of assessment costs, firms with less output would have to raise their prices more than large firms to recover these costs.

Assessing disproportionality among these firms requires knowing about the existing spatial distribution of mines, the extent and frequency of assessment/monitoring and the relation to firm size. If assessment and monitoring costs are directly correlated to land area, then it is a question as to whether large mining firms tend to utilize larger areas. For the data described in Appendix C, only one business identified in SIC 1442 “Construction Sand and Gravel” was identified in Yakima County and it was a large firm with 68 employees. A general analysis of firm size and land area is presented in Part 3.

Water Transportation Businesses

Marinas and other water transportation facilities may be affected by the proposed guidelines, but the requirements would likely parallel the requirements for land developers in most cases.

Statewide there are 661 firms in SIC codes 3731, 3732, and 4412-4493 with total employment of 15,426. Several of these industries contain only small firms including 4493 (Marinas). The gross business income of all the firms in these categories was \$2,078 million in 2001.

If the regulations developed for most marinas and similar facilities are similar in nature, they will likely be able to pass some of the additional costs along to their customers in the form of increased fees if there are not many good substitutes for these marine transportation industries. In the case of marinas, the extent that moorage fees could be raised would be based on other opportunities customers have for moorage, out of water storage, etc. If these additional costs can be passed along, this would reduce the impact of increased assessment/monitoring costs on each industry.

The extent of any disproportionality among firms will depend on the extent of the shoreline work they do and how it changes under the revised guidelines. Floating facilities will likely not experience any significant changes. Increased costs associated with construction of associated facilities on land will depend on the extent of the impacts. If bigger firms develop bigger projects and assessment costs are proportional to the

project size, then the disproportionality is reduced. A list of existing firms in these categories found in King and Yakima County is provided in Appendix D. An analysis of hypothetical land use restrictions on these firms is included in Part 3.

Part 3 – An Analysis of Scenarios Evaluating Whether the Guidelines Could Disproportionately Affect the Variety of Businesses Located Within Shorelines by Affecting Land Use

In addition to the compliance costs noted above, it is possible that revised environment designations and development standards could impact businesses located in the shoreline. These impacts would restrict the freedom of commercial and industrial property owners to use their land how they choose which could translate into lower property values. Addressing and ensuring a fair distribution of these potential impacts has been a significant input to developing the proposed SMA guidelines that are the subject of this SBEIS.

In an effort to understand how this might impact property owners, Ecology developed a model based on the existing distribution of non-residential shoreline parcels in several counties. These impacts ultimately depend on whether there are “scale effects” associated with shoreline land use (i.e. do bigger firms utilize proportionately bigger shoreline lots?) If this is the case, then bigger firms will, in general, be more extensively affected by new vegetation conservation standards, setbacks, etc.

To analyze the possible effects of changes in land use or value due to increased regulation involved development of a specific regulatory scenario. The scenario developed considered reduced land value associated with an increase in land use restrictions and is used to illustrate costs and the distribution of costs for development and re-development under the proposed rule. For the purposes of this study, the typical parcel considered will be located in a designated urban growth area, will not be subject to tidal overflow, not reasonably accessible for commercially navigable waters and subject to current regulations that designate the site for commercial or industrial use and that currently require a 50 foot setback.

While several alternatives are available that would meet the requirement for assuring no net loss of shoreline ecological functions, a simple analysis can use the hypothetical imposition of a vegetative buffer requirement. The necessary width of the buffer can be determined with a reasonably thorough knowledge of the specific shoreline and vicinity, but is likely to be between 100 and 150 feet. For any given setback or buffer size, small parcels would lose a larger percentage of their potentially useable property, but there are more methods of addressing impacts to smaller parcels that would reduce the disproportionate impact of the regulations. Therefore for this analysis, it was assumed that a 10% reduction in usable area would occur for both small and large firms. This is a reasonable scenario assuming reduced useable land will likely result from a combination of setbacks, buffers, view corridors, and space for mitigation such as stormwater facilities. The reduction in land value associated with the reduction in useable land was used as an indicator of the regulatory impact.

It should be noted that this specific scenario may not be seen within any local jurisdiction. This scenario was created as a tool for evaluating potential impacts on business, so that Ecology can use that information and ensure that the proposed rule avoids or minimizes disproportionate or unnecessary impacts. Assessment of the cost impacts to businesses necessarily involved creating this hypothetical scenario of a possible revised designation/standard within an individual jurisdiction's SMP. Under the proposed rules, however, any specific revised planning goals or development standard changes that occur will be determined by individual local governments through an extensive public involvement process.

Scenario Evaluation

To assess the impact of increased land use restrictions, characteristics of existing small and large firms were utilized. Mean and median parcel sizes obtained for a sample of existing firms (See Appendix C) were used in the analysis to represent typical parcels affected by the new regulations. These were then subject to imposition of a vegetative buffer that restricted the use of 10% of the land area. Businesses or owners of businesses associated with these parcels were assumed to experience foregone development value since their land will be restricted by the buffer requirement.

Calculation of a hypothetical foregone development value involved determining the value of land in the shoreline for the sample counties. It is well-established that land located in shorelines immediately proximate to the water's edge command a premium in the market. Use of an unmodified average land value would ignore this effect and understate hypothetical foregone development value. Adjustments were made utilizing original analysis performed for the benefit-cost analysis (BCA). These adjusted values were then used to estimate the foregone development value.⁴

In the hypothetical scenario, development or re-development is restricted by the establishment of vegetative buffer areas by the local municipality. The buffers will reduce the amount of useable area for each parcel by 10%. For the purpose of this analysis, it was assumed that the value of the land within the 10% reduction area falls by 10%, 35% and 75% in both Counties.⁵ The fact that the land can no longer be used to its fullest extent reduces the value of the land to the owner or lessee.⁶ The degree to which this restriction places a proportionate or disproportionate burden on small firms depends on the extent of the area restricted for small and large firms. Once this is known, it is relatively easy to calculate the impacts.

⁴ These adjustment premiums may underestimate or overestimate the proximity premiums in any one area, but since the comparison between small and large firms is done for the same location, they will only affect the compliance cost estimates not the extent of the disproportionate impact.

⁵ The BCA prepared for these guidelines utilized 75% for incorporated cities and 35% for rural areas. The data included both incorporated and unincorporated areas.

⁶ In the case of leased land subject to a new restriction, a re-negotiation of the lease may occur to account for the new restriction. If this does not occur, then some of the impact could be borne by the lessee instead of the owner.

Data for King and Yakima Counties were used to determine the average parcel size and the cost impacts for small and large firms. Larger firms tend to have larger parcels. However, utilizing the employment data, it can be shown that the square footage per employee falls with firm size (See Appendix C). Utilizing this information, and mean and median shoreline values for King and Yakima County,⁷ Table 6 was developed.

Table 6. Mean and median compliance cost per employee for alternative buffer requirements in King and Yakima County.

Buffer Area Value Reduction (%)	(1) Small Firm Compliance Cost (\$/employee)	(2) Large Firm Compliance Cost (\$/employee)	Ratio (1)/(2)
Mean Values			
<i>King County</i>			
75% Reduction ⁸	\$37,650	\$4,612	8.2
35% Reduction	\$17,570	\$2,152	8.2
10% Reduction	\$5,020	\$615	8.2
<i>Yakima County</i>			
75% Reduction	\$11,748	\$6,013	2.0
35% Reduction	\$5,482	\$2,806	2.0
10% Reduction	\$1,566	\$802	2.0
Median Values			
<i>King County</i>			
75% Reduction	\$34,761	\$3,092	11.2
35% Reduction	\$16,222	\$1,443	11.2
10% Reduction	\$4,635	\$412	11.2
<i>Yakima County</i>			
75% Reduction	\$13,647	\$3,171	4.3
35% Reduction	\$6,369	\$1,480	4.3
10% Reduction	\$1,820	\$423	4.3

As can be noted in the table, impacts, as measured by \$/employee tend to be disproportionately borne by small firms. The disproportionate impact tends to be greater in more urban areas due to the types of land uses in those areas. In general, the impact on small firms in King County for this hypothetical scenario is 8-11 times the impact on large firms. In Yakima County the impact on small firms tends to be 2-4 times the impact on large firms.

Uncertainty and Qualifying Statements

The analysis above suggests that the impacts of the proposed guidelines could disproportionately impact small businesses. This result is based on the specific scenario

⁷ For this analysis \$20/square foot for King County and \$1/square foot for Yakima County were used.

⁸ "75% Reduction" means a 75% reduction in land value for the 10% of area now restricted in use. Reductions in land value do not include offsetting reductions in property tax burden.

outlined above and specific data obtained for King and Yakima Counties. As such, several qualifying statements should be mentioned, some of which substantially mitigate the potential for disproportionate impact. As noted previously, the scenario developed is one possible outcome of a local jurisdiction's SMP development process. Many other outcomes are possible that could alter the results presented above. However, for any development regulation or environment designation that affects all properties the same, the conclusions listed above should hold.⁹ Additionally, some industries likely to be present in the shoreline are not represented in the sample data.¹⁰ As such, explicit conclusions based on data assessment for those industries cannot be formed.

Research has suggested that requiring buffers can lead to a net increase in land values.¹¹ That is, even though a parcel owner that is required to provide a buffer may suffer a loss, the surrounding properties might experience a gain through an increase in property values. The increased value results from greater visual and physical access to the shoreline. The existing research has been conducted on residential parcels, but it is not difficult to imagine the same could hold true in commercial areas, especially areas involved in providing services (e.g. restaurants, bars, etc.) To model this, a hypothetical scenario specifying the types of surrounding firms, employment levels, etc. would have to be created and existing spatial data would have to be obtained. This possibility was not explicitly modeled in this analysis. However, if the establishment of buffers did lead to net benefits to surrounding firms, the benefits would be disproportionately experienced by small firms for a fixed spatial distribution.¹²

Part 4 - Actions Taken to Reduce the Impact of the Rule on Small Business.

The draft regulations include several statements of principle that were used for drafting the guidelines. Among these is the requirement that the guidelines assure compliance with all constitutional and statutory limitations on the regulation of private property. To this end, the guidelines require that development in the shoreline is obligated only to mitigate for the impacts to the environment caused by the proposed development. This assures generally that the mitigation measures and the associated costs bear a reasonable relationship to the scale and scope of the development. The mitigation requirements are also intended to allow significant opportunity for creative approaches and a wide variety of alternatives so that the mitigation associated with a particular development can be customized to fit the applicant's interests so long as the net effect is that the impacts are in fact mitigated. The guidelines also clarify their applicability in areas such as existing and on-going agricultural practices, or existing and established businesses, thereby reducing the costs associated with regulatory uncertainty.

⁹ This would also hold for assessment/monitoring costs that were proportional to land area.

¹⁰ For example, no shellfish harvesters were present in the data.

¹¹ Brown and Pollakowski, (1977).

¹² Small firms would benefit more (on a \$/employee basis) from a given increase in land value due to setbacks on a neighboring piece of property.

Another feature of the guidelines that allows for flexibility is that they are designed primarily as a set of performance measures. This means that local government has latitude to design their local master program to fit local circumstances so long as the overall performance requirements are met. Thereby, local government has the ability to adjust their specific local approach to an issue in a manner that minimizes cost impacts to local business interests. Additionally, as noted above, the Shoreline Management Act requires that local government make provisions for conditional uses and variances. This provides the regulatory flexibility to adjust requirements when appropriate and necessary so long as the overall interests that the SMA was designed to protect are properly addressed.

As established in statute, the schedule for implementation of these guidelines allows local government up to 11 years to develop and adopt master programs after the projected adoption date of the regulation. This means that most businesses that may be impacted by the regulations will have a substantial amount of time to adapt prior to actually being affected by the regulations.

In drafting the guidelines it was fully recognized that numerous other state and local laws currently exist which contain requirements that are consistent with the goals, and objectives of the SMA and which can contribute to satisfying the SMA's overall policy directives. With this in mind, the proposed guidelines wherever possible avoided creating new requirements of business where existing regulations could satisfy the need. This has the effect of eliminating potentially redundant and/or duplicative requirements that can and do have a cost to local government and indirectly to small businesses that must ultimately comply. The guidelines for example, promote the concept of adoption by reference (when updating local SMP's) of other existing land use regulations, such as local (GMA) Critical Areas Ordinance provisions. Further, the guidelines often wholly or in part defer to the requirements of other existing laws, when addressing such commercial activities as forest practices and mining. Again this approach has the effect of reducing and mitigating the cost of compliance on small business.

Additionally, the cost of new restrictions applicable to certain shoreline small businesses, such as those that presently design and build bulkheads and related shoreline stabilization structures, is to some degree mitigated by the promotion of new ways of doing similar business. New approaches promoting the planting of native vegetation and bioengineered solutions to shoreline stabilization rather than traditional hardened bulkhead structures for example should create new opportunities for small business and mitigate for the cost of compliance in this sector.

Part 5 – How Was Small Business Involved in the Development of the Rule?

Ecology provided multiple opportunities for involvement by interested citizens, businesses, organizations and interest groups throughout the process of development of the guidelines. This has included public meetings, workshops and hearings, broad distribution of the various drafts and substantial opportunity for comment. A summary of

the input received can be found in the “Responsiveness Summary: State Shoreline Master Program Guidelines” (Ecology, 2000). In this way, small business was involved in some of the drafting of the guidelines.

More recently, during the year 2002, small business worked directly with environmental and local government representatives, using professional mediators. As a result of that effort, a very broad coalition of interest groups (including groups representing small business) reached a consensus that Ecology should proceed with rulemaking on the draft rules that are evaluated by this SBEIS. A list of those groups is available by examining court documents associated with the resolution of litigation arising out of a prior version of the guidelines.

The business groups and organizations included:

- Washington Aggregates and Concrete Association,
- Association of Washington Business (AWB),
- Associated General Contractors of Washington,
- Basta Marine, Inc.,
- Building Industry Ass’n of Washington (BIAW),
- Independent Business Ass’n of Washington,
- National Ass’n of Industrial and Office Properties,
- National Federation of Independent Business,
- Northwest Marine Trade Association,
- Rose Ranch,
- United Property Owners of Washington,
- Washington Association of Realtors,
- Washington Cattleman’s Association,
- Washington Contract Loggers Association,
- Washington State Farm Bureau,
- Washington State Grange,

Part 6 – List of Industries Required to Comply with the Proposed Guidelines

The Shoreline Management Act does not apply to any one group or type of business or industry but rather applies to any use made of the shorelines of the state. Taken statewide, all groups and types of business could probably be found to be represented somewhere in the shorelines, however, since shorelines comprise only about 2% of the State’s total land base, very few businesses would be found predominantly in the shoreline. Certainly the various businesses that qualify as water dependent are affected most directly.

While the regulations generated by local government in response to the guidelines may affect any business located or conducted in the shorelines, as previously noted only those that propose to establish new uses or facilities or expand existing uses or facilities

would likely be directly affected as the ongoing operation of existing business uses and facilities are generally allowed to continue.

As noted previously, the main sectors that will likely be affected will be the development business, shoreline stabilization contractors, agricultural business, and mining and water transportation. Based on this, individual SIC codes were evaluated and are listed in Appendix B. Also listed in Appendix D is the SIC codes for businesses found to be located on the shoreline for King and Yakima Counties.

References

1. Brown, Gardner & Henry Pollakowski, Economic Valuation of Shoreline, Review of Economics and Statistics, Vol. 59, No. 3, (1977)
2. Washington State Department of Agriculture, Washington Agricultural Statistics, 2002
3. Washington State Department of Ecology, Evaluation of Probable Benefits and Costs: Amended Shoreline Master Program Guidelines, Publication 00-06-043, (2000)
4. Washington State Department of Ecology, Proposed Shoreline Master Program Guidelines Final Environmental Impact Statement, Publication 00-06-020, (2000)
5. Washington State Department of Ecology, Responsiveness Summary State Shoreline Master Program Guidelines, Publication 00-06-042, (2000)

Appendix A

A Brief History of the Shoreline Master Program Guidelines Update

- 1990: Legislature passes GMA.
- 1991-94: In response to local government requests, Ecology develops and implements the Shorelands Growth Management Project to deliver technical assistance to local governments targeted at SMA/GMA integration. While the SMA and GMA are found to be generally compatible, there are procedural, technical and legal questions that lead to a conclusion that the two statutes need some changes to assure they work together. This issue is presented to the Governor's Regulatory Reform Taskforce in 1994.
- 1995: In response to the Governor's Regulatory Reform Taskforce recommendations, Legislature enacts ESHB 1724 which makes a variety of changes in both the SMA and GMA statutes and directs Ecology to periodically review and update the SMA guidelines as a means of assuring consistency between SMA and GMA policies.
- 1996: Focus groups conducted in Everett, Longview, Moses Lake and Tacoma on Guidelines issues. A statewide public opinion telephone survey of 840 residents, split equally east and west side, on shoreline management was also conducted to assess public views of shoreline management issues. Convened Shorelines Policy Advisory Group (ports, cities, counties, League of Women Voters, agriculture, business, forestry, tribal and environmental groups) which resulted in preparation of a draft of revised guidelines. Draft was circulated for comment to interested parties and local governments and four public hearings were held.
- January 1997: Local governments and ports ask Ecology to put further Guidelines rule development "on hold" until Land Use Study Commission (LUSC) is consulted. Ecology agrees.
- July-October 1997: a broadly representative subcommittee of the LUSC holds seven public meetings to address SMA/GMA integration issues. The workgroup reached no consensus, but issued a report providing detailed directions for more "efficient and effective" shoreline regulations and related legislation and also documenting the need for updated guidelines.
- May 1998: With endorsement of the Governor and the Joint Natural Resources Cabinet, Ecology establishes the Shorelines Guidelines Commission, with representatives of cities, counties, tribes, ports, forestry, the environmental community, and water-dependent business. Agriculture and general business community were invited, but declined to participate. The Guidelines Commission holds 19 public meetings and advises Ecology on guidelines update; in the process the commission reviewed two different complete drafts of the guidelines and issues a Final Report on February 16, 1999, advising Ecology to proceed with a broader rule-adoption process.
- 1999: Ecology officially releases formal draft rule, starts formal rule-adoption process. Four open house/public hearings held in May 1999. Local governments request more hearings and extension of comment deadline. Ecology agrees. Five more hearings held

in July with comment period extended to August 4. Ecology receives 2,500 comment letters, and more than 200 people testify at the nine hearings. After review of public comment, Ecology terminates the formal rule adoption process and works to further clarify and fine-tune the guidelines (rule) language.

- December 17, 1999-March 1, 2000: Held “informal” public comment period on new “working draft” guidelines, with emphasis on getting reaction from legislators and local government implementers. Working draft circulated to interested parties and posted on internet site. Received approximately 100 comment letters.

- September 1999-May 2000: met with federal agencies and tribes to prepare an optional “Path B” of guidelines for local governments that choose to seek ESA liability protection through their shoreline programs; conducted “informal” review period on draft Path B with local and state agencies.

- August 1999-May 2000: met extensively with legislators, local governments and interested groups at meetings, conferences and workshops to present information and gather comments on informal draft Path A and B rule language.

- Throughout the rule development process, interested parties were kept informed through a variety of means, including conference and in-the-field discussions, news releases, paid advertisements, newsletters (*Coastal Currents*, *Confluence*, and *SMP Update*) sent to all cities and counties and interested parties, and through a web site. City and county associations and other groups also reported on progress in their own newsletters.

- June-August 2000: a second formal round of guidelines rule adoption is begun, commencing a 60 day comment period. The proposed rule contains two different paths: Path A responding to local governments that wanted more flexibility in how they met SMA standards; an optional Path B containing more prescriptive standards designed to support both SMA and ESA compliance. Public hearing notices were published in every county of the state for three weeks preceding each hearing. News releases were issued and the hearings were covered by newspapers and radio stations statewide. Notice of the hearings were sent to over 4,000 interested parties and advertised in Ecology’s *Confluence*, with a circulation of over 9,500 people. Eight public hearings were held in Pasco, Spokane, Wenatchee, Olympia, Raymond, Vancouver, Seattle, and Bellingham. Several hearings were broadcast on Television Washington (TVW). Guest editorial columns were printed in numerous newspapers across the state. Ecology received more than 2,000 letters during the comment period.

- August-November 2000: Ecology compiles and analyzes public comments; completes a final environmental impact statement; implementation plan; benefit/cost analysis; and prepares a detailed response to all comments received.

- November 29, 2000: After reviewing all related materials Director Fitzsimmons adopts new shoreline management guidelines. Ecology releases responsiveness summary and related materials to all interested parties.

- January 2001: the guidelines rule is appealed to the Shoreline Hearings Board by numerous parties and individuals including a broad coalition of business and local government interests and environmental organizations.

- August 27, 2001: the State of Washington Shorelines Hearings Board invalidated the new guidelines rule for exceeding the statutory authority of the SMA (by implementing the federal ESA) and for failure to comply with certain procedural requirements of the Administrative Procedures Act, most notably required public review of economic analyses and related materials. The SHB's action remanded the rule to Ecology for re-adoption consistent with the board's decision. The decision did not invalidate Ecology's repeal of the previous guidelines - thus leaving the state with no shoreline guidelines, even though the existing SMA statute and local shoreline programs remain in effect.

- January-December 2002: the Governor and Attorney General convene mediation talks aimed at reaching a legal settlement. The parties all filed appeals to the SHB ruling to preserve their standing in Superior Court. The parties appointed representatives to a steering committee that did the negotiating. Former State Supreme Court Justice Richard Guy and Bill Ross served as mediators.

- December 2002: the negotiating parties reach agreement on: new draft guidelines to propose for rule-making; a package of legislation to propose in 2003 that replaces the existing 2-year update schedule for local governments with a phased-in schedule from 2005 to 2014; provision of \$2 million in the upcoming 2003-05 budget for the first wave of cities and counties to get started, with additional funding proposed to complete the update schedule; and terms for concluding the lawsuit.

Appendix B SIC Codes¹³

<i>Code</i>	<i>Description</i>	<i>No. Firms (<50 Employees)</i>	<i>Employment</i>	<i>No. Firms (>50 Employees)</i>	<i>Employment</i>
0111	Wheat Farming	1,107	1,066		
0115	Corn Farming	29	57		
0119	Cash Grains (NEC) ¹⁴	214	209		
0134	Irish Potatoes	126	1,034	6	413
0139	Field Crops, Except Cash Grains (NEC)	532	2,254	8	722
0161	Vegetables and Melons	330	971	6	390
0171	Berry Crops	231	783		
0172	Grape Farming	306	1,615	8	927
0175	Deciduous Tree Fruits	2,752	13,039	42	4,276
0179	Fruits and Tree Nuts (NEC)	21	169		
0181	Ornamental Floriculture and Nursery Products	303	3,219	14	1,733
0182	Food Crops Grown Under Cover	24	332		
0191	General Farms, Primarily Crops	232	1,270	8	785
0211	Beef Cattle Feedlots	26	606		
0212	Beef Cattle, Except Feedlots	247	383		
0213	Hogs	5	5		
0214	Sheep and Goats	10	26		
0241	Dairy Farms	539	3,607		
0251	Broiler, Fryer and Roaster Chickens	19	55		
0252	Chicken Eggs	27	569		
0254	Poultry Hatcheries	4	89		
0259	Poultry and Eggs (NEC)	4	22		
0271	Fur Bearing Animals and Rabbits	14	38		
0272	Horses and Other Equines	90	175		
0273	Animal Aquaculture	36	197		
0279	Animal Specialties (NEC)	45	132		

¹³ All firm number and employment data were taken from the Washington State Employment Security Department, Labor Market and Economic Analysis, September, 2002. Data represents totals for these industries statewide.

¹⁴ (NEC)-Not Elsewhere Classified.

0291	General Farms, Primarily Livestock & Animal Specialties	6	15		
1442	Construction Sand and Gravel	77	711	5	326
1629	Heavy Construction (NEC)	373	2,044	16	2,051
3731	Ship Building and Repairing	48	554	9	946
3732	Boat Building and Repairing	216	1,711	13	1,107
4412	Deep Sea Foreign Transportation of Freight	17	253		
4424	Deep Sea Domestic Transportation of Freight	9	387	8	763
4449	Water Transportation of Freight	18	326		
4481	Deep Sea Transportation of Passengers, Except by Ferry	4	1,238		
4482	Ferries	23	1,654		
4489	Water Transportation of Passengers	18	229		
4491	Marine Cargo Handling Services	68	2,582	16	1,731
4492	Towing and Tugboat Services	22	698	4	305
4493	Marinas	101	578		
4499	Water Transportation Services	67	364		
6552	Land Subdividers and Developers	364	1,749	5	334

Appendix C

Determination of Existing Mean/Median Land Areas by Firm Size

To aid in assessment of the effects of revisions to the shoreline regulations, Ecology obtained data from several sources. The initial step involved obtaining data from Assessor's roles for a few sample counties. The counties selected included King County, an urban county in Western Washington, and Yakima County, a predominantly agricultural county in Eastern Washington. These counties were selected both to represent the East and West of Washington and because the required data could be relatively easily obtained. In general, King County tends to be more urban than most of the Westside Counties but has most of the commercial endeavors located in Western Washington. Yakima County is predominantly rural, with a small number of more urban areas. It possesses many of the characteristics of the more rural eastern counties. Though the following analysis is based explicitly on these two counties, and it is likely that specific cases may vary from the ones examined here, the data was used to be representative of the types of ownership and commercial endeavors located elsewhere in the State.

The methodology for each County was similar. Assessor's data was obtained for all land zoned commercial in the County.¹⁵ This data included identifier, land use, square footage, and waterfront length and attributes in some cases.¹⁶ Waterfront locations for Yakima County are not kept in the Assessor's database and so they were first determined utilizing Yakima's Geographic Information System (GIS) and then merged with Assessor's information. This data was then merged with other data that indicated taxpayer name and address. This was used to identify land ownership which might differ from the observed land use. This data was further analyzed and government entities were removed. Lastly, employment data was obtained for each parcel owner that could be identified from the Washington Employment Security Department. This yielded the SIC code and employment levels¹⁷ for each identified firm allowing Ecology to determine small from large firms and analyze parcel sizes. Each group was then statistically evaluated to determine mean and median lot sizes. These mean and median lot sizes were then used in the impact evaluation described in Part 3.

Data Analysis

The data obtained for King County included a unique identifier, property name, parcel size and in some cases waterfront length and attributes. This data was merged with a separate file that contained taxpayer identification and address to establish parcel ownership. All publicly owned parcels and privately owned parcels owned by out of state

¹⁵ Yakima County provided all shoreline parcels. Use codes were used to identify which parcels were commercial. All developed and vacant residential land was removed prior to the analysis.

¹⁶ King County has fields for shoreline length and attributes. However, it is only "active" in a small percentage (approximately 17%) of cases.

¹⁷ In most cases, the exact number of employees was obtained if the data existed at all. In a small number of cases, only employment ranges were available.

companies were identified and removed.¹⁸ The remaining dataset contained approximately 600 individual records. This data was then individually linked with employment data that was either publicly available at the Washington State Employment Security Department's (ESD's) website or confidential data obtained from ESD.

In general, there are both small and large firms in the dataset. There are also a significant number of individual property owners. These are generally not classified as "business entities" but since they involve ownership of commercial land and likely have as the main objective the "purpose of making a profit" were included in the analysis (separately) below. All parcels owned by individual property owners were counted as having one employee.¹⁹ Many corporations could not be located in either employment database. These include a large number of "LLC's" and some corporations and trusts. It is likely that these corporations are small firms (i.e. have less than 50 employees). However, they were not included in the analysis that follows.

Figure 1 indicates the size class and frequency for properties identified for King County²⁰. As can be seen the largest size class for King County is individual property owners followed by small firms and large firms.

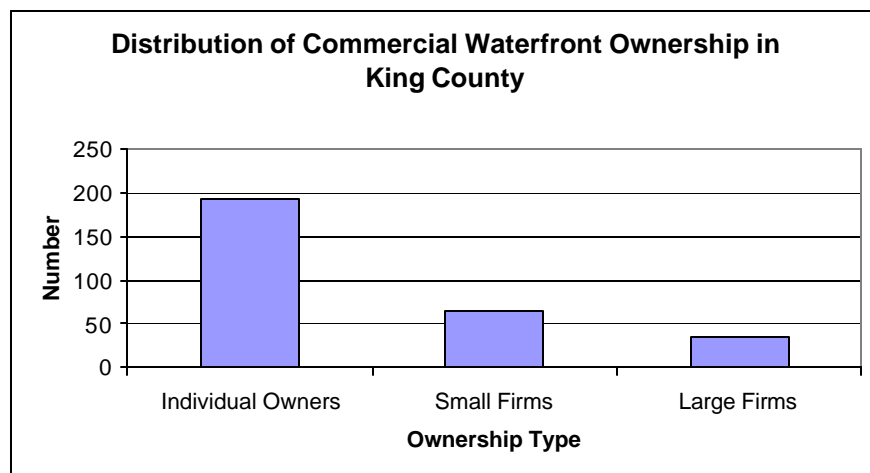


Figure 1. Distribution of privately-owned waterfront property in King County

Analysis of the data revealed the typical property holdings for the different classes. Table 1 shows the results. As can be seen, larger firms generally have larger parcels whether measured by mean or median parcel size. The mean property size for large firms is

¹⁸ Removing out-of state firms was done due to the difficulty in obtaining employment data on firms located throughout the U.S.

¹⁹ This includes cases where multiple parties were listed as the taxpayers of record.

²⁰ 168 non-individual property owners could not be found in either source of data. The impact of this is discussed in what follows. If they are indeed small firms, the ownership distribution would change such that small firms would be the predominant form of ownership for waterfront commercial parcels in King County.

approximately 5 times the mean small size parcel. The median property size for large firms is 2.1 times the mean small parcel size.²¹

Table 1. Ownership and mean and median parcel size for waterfront properties in King County.

Ownership	Mean Area (sq. ft.)	Median Area (sq. ft.)
Individual Owners	173,600	104,671
Small Firms	251,001	115,870
Large Firms	1,248,374	241,146

There are approximately 36 large firms in the sample and 65 small firms that could be identified. However, incorporating the individual property owners and the unidentified firms adds over 300 businesses. As such, this study uses all of the largest businesses in the sample to describe the businesses that are required to comply. In some cases, the exact number of employees is not known, but only the size range. In this case, a conservative assumption using the size class was utilized. This was used to generate the firm size and SIC codes listed in Appendix D.

Data for Yakima County was also obtained. GIS records for parcels located along the Yakima, Naches and Tieton Rivers were evaluated and all waterfront parcels along these rivers with associated parcel sizes, taxpayer record, and use code were provided. This data was analyzed to remove all residential parcels and all vacant residential land and then individually matched with employment data using the databases described above to determine the number of employees and SIC codes. The predominant form of shoreline ownership in Yakima is also individual ownership. However, most of the land is classified for agricultural use and so is likely to be utilized for the purpose of making a profit. As such, it was also included separately in the analysis that follows. All publicly owned parcels and parcels owned by out of state companies were removed. All parcels that could not be identified as individually owned or corporate owned were not included in the analysis.²²

In Yakima County a similar distribution of land ownership by firm size as King County exists for the waterfront parcels considered. From Figure 2 we can see that the distribution of ownership indicates that individual ownership is the predominant type of ownership followed by small firms and large firms.

²¹ The median is not sensitive to extreme values and so would not be affected by extremely large parcels owned by large firms.

²² This amounted to 18 entities that could not be identified.

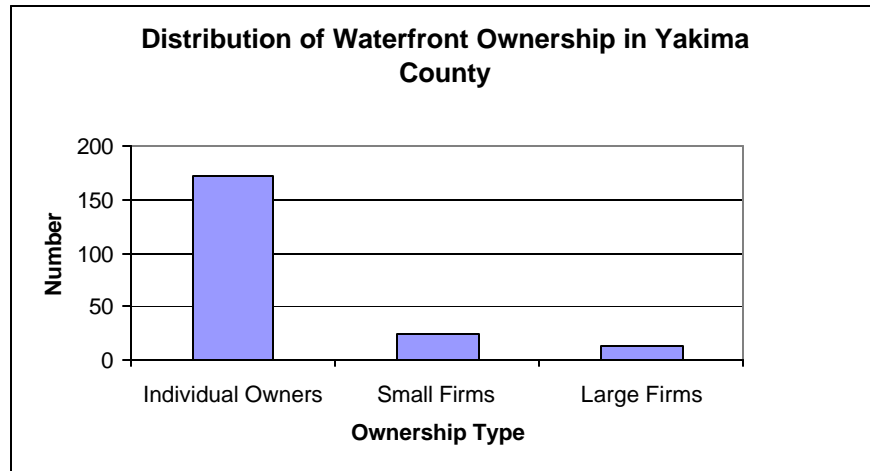


Figure 2. Distribution of privately-owned waterfront property in Yakima County

Analysis of the data revealed the typical property holdings for the different classes. The results are presented in Table 2. As can be seen, larger firms generally own larger parcels whether measured by mean or median size. The mean large firm parcel size is approximately 6.3 times the mean small size parcel. The median parcel size for large firms is 2.3 times the median small parcel size.²³

Table 2. Ownership and mean and median parcel size for waterfront properties in Yakima County.

Ownership	Mean Area (sq. ft.)	Median Area (sq. ft.)
Individual Owners	1,110,479	701,282
Small Firms	1,879,648	1,273,750
Large Firms	11,866,447	2,874,934

There are approximately 13 large firms in the sample and 25 small firms that were identified. However, incorporating the individual property owners and the unidentified firms adds approximately 190 businesses. As such, the study uses all of the largest businesses in the sample to describe the businesses that are required to comply. The firm size and SIC codes are listed in Appendix D.

The economic impacts can be evaluated in several ways. For the purposes of this analysis, the impacts were determined using “cost per employee”. As such, the relevant land area measure is not the overall parcel size, but the parcel size per employee for the two types of firms. The data was divided into small and large businesses and the mean and median parcel size/employee were calculated. This involved utilizing the total area provided and dividing by the number of employees for each firm. Table 3 displays the square footage/employee distribution for King and Yakima Counties. The mean and median parcel size/employee are important since they form the basis for calculating the

²³ The median is not sensitive to extreme values and so would be less affected by extremely large parcels owned by large firms.

reduction in land values and other cost impacts associated with the increased requirements on businesses.²⁴

Table 3. Mean Square footage per employee for businesses located in King and Yakima County Shorelines.

	King County (SF/Employee)	Yakima County (SF/Employee)
Small Businesses*	25,100	156,637
Large Businesses	3,075	80,179

* Small business excluding individual ownership

From Tables 1 and 2, it was determined that large firms tend to have larger parcels, but as can be seen from above, when employment is incorporated, larger firms have smaller parcels on a per employee basis. For King County, the ratio of employee/square foot between small and large businesses is approximately 8.2. For Yakima County the ratio is 2.0. In addition, the actual square footage/employee tends to be larger for Yakima County for all business classifications than for King County. This is likely due to the different commercial enterprises and associated land use in those two locations. Table 4 evaluates the median square footage/median employee values.

Table 4. Median square footage/employee for businesses located in King and Yakima County shorelines.

	King County (SF/Employee)	Yakima County (SF/Employee)
Small Business*	23,174	181,964
Large Business	2,061	42,278

* Small business excluding individual ownership

For King County, the median ratio of employee/square foot for small and large businesses is approximately 11.2. For Yakima County the ratio is 4.3. As can be seen, the median square footage/employee values are smaller than the mean values, but the ratios are greater. These increased values represent the elimination of outlying large firms from the statistic. The square footage/employee again tends to be larger for Yakima County than for King County.

The impact on businesses will be measured on a per employee basis. As such, the fact that smaller firms have greater area per employee implies that any land use regulation applied equally to small and large businesses will likely be disproportionately borne by small firms. The mean and median parcel areas described above were utilized as the basis for the cost impact evaluation provided in Part 3.

²⁴ Small and large firms were not further separated by SIC code because there were not enough firms in most categories to provide a systematic comparison.

Appendix D

Employment Breakdown by Sector-King and Yakima County Shorelines²⁵

SIC	King County				Yakima County			
	<i>Units (<50)</i>	<i>Employees (<50)</i>	<i>Units (>50)</i>	<i>Employees (>50)</i>	<i>Units (<50)</i>	<i>Employees (<50)</i>	<i>Units (>50)</i>	<i>Employees (>50)</i>
0115					1	1		
0139					1	25	1	50
0175					11	72	2	104
0191					1	11		
0211							1	205
0212					1	2		
0291					1	35		
0723							2	177
0811					1	1	1	50
0851					1	1		
1442							1	68
1521	2	43	1	50				
1542			1	109				
1611			1	115			1	100
2033							1	653
2091								
2092			2	1065				
2099			1	50				
2421	1	25	1	3091			1	62
2836								
2899	1	10						
3273			1	85			1	68
3462			1	100				
3565					1	12		
3592			1	219				
3731	1	36	4	1542				
3732			1	334				
4424			1	73				
4489								
4491	1	1	1	110				
4492	2	40	2	602				
4493	9	28						
4911			1	1941				
5032			1	267				

²⁵ Employment values based on 2000 data provided by Info USA, Omaha, NE, and 2002 data provided by the Washington Employment Security Department. In some cases, only size classes were available and the minimum value for the size class was utilized.

5146								
5148							1	203
5172								
5311			1	1000				
5411			1	82	1	7		
5812	2	57						
5983	1	13						
6021	1	20						
6091	1	43						
6282	1	19						
6411	1	20						
6512	4	57						
6513	2	26						
6515	2	12						
6531	5	48						
6552	4	24						
6719								
7011	1	10			1	44		
7032	2	6						
7033					1	1		
7361	1	1						
7521	1	22	1	137				
7992	1	10						
7997	4	6	3	233				
7999	2	6	1	250	1	21		
8051			1	250				
8059								
8211					1	22		
8322			2	815				
8331			1	191				
8361	1	19						
8399			1	50				
8611	1	1						
8641	3	7			1	35		
8661	3	25			1	2		
9999	1	5						